

A.C. 449501/LEAMINGTON SPA

Borough of Royal Leamington Spa.

Annual Report

OF

Medical Officer of Health

FOR

1920.

Leamington Spa :

T. J. KENNARD, PRINTER, WARWICK STREET.

BOROUGH OF ROYAL LEAMINGTON SPA,

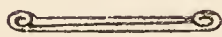


ANNUAL REPORT

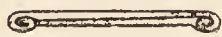
OF THE

MEDICAL OFFICER OF HEALTH,

FOR THE YEAR 1920.



W. L. GOLDIE, F.R.C.S., D.P.H.,

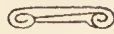


Leamington Spa :

T. J. KENNARD, PRINTER, WARWICK STREET,



Borough of Royal Leamington Spa.



HEALTH COMMITTEE.

Mr. Alderman MASON (Chairman).

The MAYOR (Mr. Councillor ENGLAND).

Mr. Alderman BAKER.

„ „ FLAVEL.

„ „ HOLT.

„ „ THURSFIELD.

„ Councillor ATKINSON.

„ „ FOX.

„ „ MOLESWORTH.

„ „ PRATT.

Mrs. „ RICE.

Miss „ SARGEAUNT.

MATERNITY AND CHILD WELFARE COMMITTEE.

Mr. Alderman MASON (Chairman).

The MAYOR.

Mr. Alderman FLAVEL.

„ „ HOLT.

„ Councillor ATKINSON.

„ „ MOLESWORTH.

Mrs. „ RICE.

Miss „ SARGEAUNT.

Mrs. ATKINSON.

„ GOODWAY.

„ WILLINGTON.

„ OLIVE.

STAFF OF THE PUBLIC HEALTH DEPARTMENT.

Inspectors.

A. M. HARRISON.
(Resigned June, 1920.)

G. H. HAMMOND.

H. J. SPICER.
(Appointed June, 1920.)

E. RINGER, M.R.C.V.S.

Health Visitor.

Miss LUCY E. PIERCE.

Clerk.

Miss WEBB.

Public Analyst.

BOSTOCK HILL & RIGBY (Birmingham).

Medical Officer of Health, School Medical Officer, and Bacteriologist.

W. L. GOLDIE, F.R.C.S., D.P.H.



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Public Health Department,
12, Hamilton Terrace,
Leamington Spa,
April, 1920.

To the Chairman and Members of the Health Committee.

LADIES AND GENTLEMEN,

I beg to submit to you the Annual Report for the year 1920.

The Vital Statistics for the past year may be considered on the whole satisfactory.

The Birth-rate, 22·2 is the highest recorded since 1888, while the number of births, 654, is the largest in the Borough since 1874, the first year from which continuous statistics are available.

The corrected Death-rate, 10·83, compares favourably with both that for the whole of England and Wales, viz., 13·8, and with that for towns of a population between 20,000 and 50,000, viz., 12·6.

The Infantile Mortality figure, 62·6, is higher than that for last year, but, on the other hand, is well below that for the 148 smaller towns, for which the figure is 90, and would seem to show that the work done in the direction of Infant Welfare has not been wasted.

It is a cause of regret, however, that the Infant Welfare Clinic up to the present time does not appear to have attracted those mothers in poorer circumstances to whom it might be thought advice as to the upbringing and feeding of their children would be most beneficial, though even in this respect there is a distinct improvement, 170 children born in 1920 having been examined there during the year.

In this, as in other towns, the most serious problem to be faced is that of Housing. For some years before the War, despite the increase of population, there had been a very marked diminution in the number of houses erected annually.

For the five years of the War there was an almost complete cessation of house building, whilst since the War the cost of material and labour has prohibited any great private enterprise in this direction.

Your late Medical Officer of Health, Dr. GIBBONS WARD, with Officials from the Ministry of Health, estimated the shortage of houses in Leamington, in 1919, at 529. To meet this need, schemes have been sanctioned by the Ministry of Health for the erection of 132 houses on the Tachbrook Road site and 34 on the Leicester Street site.

It is evident that though these will to a certain extent help to ease the present overcrowding, the number is totally inadequate for the needs of the Town.

I have to record one change in the staff of this Department. Your Inspector, Mr. HARRISON, obtained an appointment at Carlton, near Nottingham, and Mr. H. J. SPICER was appointed in his place.

I would like here to express my thanks to my predecessor, Dr. GIBBONS WARD, for all the kindness and assistance he has shown me. My best thanks are also due to the Town Clerk for his help at all times; also to the Borough Engineer and Borough Treasurer, and all my colleagues in this Department, without whose assistance it would have been impossible to carry out the work in its many different branches. My thanks also are due to you, Ladies and Gentlemen, for your courtesy and kindness on all occasions.

I am,

Your obedient Servant,

W. L. GOLDIE.

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SUMMARY OF VITAL STATISTICS, &c.,
FOR THE YEAR 1920.

Estimated Population (Middle 1920)	29,445
Census Population, 1911...	...	...	26,713
Natural Increase of Population, 1919	...	...	270
Birth-rate ...	...	...	22·2 per 1,000
Death-rate (Crude)	...	...	13·04 „
Death-rate (corrected for Age and Sex Constitu- tion)	...	...	10·83 „
Infantile Mortality, per 1,000 Births	...	...	62·5
Zymotic Death-rate	...	...	0·27 per 1,000
Pulmonary Tuberculosis Death-rate	...	...	·30 „
Other Tuberculosis Death-rate	...	...	·03 „
Cancer Death-rate	...	...	1·12 „
Average Age at Death	...	...	63·6 years.
Density of Population per Acre...	...	...	10·47

PHYSICAL FEATURES AND GENERAL CHARACTER OF DISTRICT.

The Borough of Royal Leamington Spa is situated on the adjacent slopes of two hills, between which runs the river Leam. Generally speaking, the sub-soil is porous and is composed of Sand and Gravel ; there is Clay in places.

The Climate is equable and well suited for the purpose of a residential town and Spa, the prevailing wind is West. Further information as to the Meteorological Conditions is given at the end of this Report.

The town itself, especially the most modern part, is well planned and laid out, the numerous Forest Trees and Pleasure Grounds entitle it to the eminent position to which it has attained amongst Inland Watering Places.

SOCIAL CONDITIONS.

In accordance with the request of the Local Government Board, the following brief note is given respecting Social Conditions.

There are few industries in the Borough ; in fact, apart from two Factories, the population is mainly concerned in supplying the wants of Residents or Visitors. Roughly speaking, one may divide the population into the following classes :—

(1) Those who reside in the town because of its natural advantages, and who are in a position to reside in any other town should they consider it more desirable.

(2) Those who reside in Leamington Spa and travel daily to the neighbouring industrial centres of Coventry and Birmingham. The number of these has been increased very considerably during recent years, and they influence to a serious extent the problem of house shortage.

(3) Those who supply the wants of Inhabitants and Visitors to the Spa.

(4) Visitors who come to the Spa in search of health. The number of these fluctuates according to the time of the year, being greatest in the Spring and Autumn.



MEDICAL CHARITIES.

The Warneford Leamington and South Warwickshire General Hospital and Bathing Institution is the chief medical charity. The work of the above Hospital is supplemented by that of the Provident Dispensary; this Institution is, as its name implies, partly supported by the contributions of the Members.

The Midland Counties Home for Incurables draws patients from all parts of the country; its title indicates the nature of the work carried out.

The Borough is within the Warwick Union, and the Poor Law Hospital is situated at Warwick some two to three miles away.

POPULATION.

The estimated population of the Borough at the middle of 1920, as calculated by the Registrar-General, was 29,445.

The Natural increase of population, expressed by the difference between the number of Births and Deaths, was 270.

The Census Returns will be published too late this year for insertion in this report. On the last eight occasions these figures have been as follows:—

1851	...	15,723
1861	...	17,402
1871	...	20,917
1881	...	22,976
1891	...	26,930
1901	...	26,888
1911	...	26,713

The area of this Borough is 2816 acres divided as follows:—

Leamington Priors	...	...	1594
New Milverton	...	...	691
Lillington	...	...	531

BIRTHS.

654 Births were registered during 1920, and their distribution as to Wards is indicated in the following Table. The Birth-rate for 1920 was 22·2 per 1,000: this shows a noticeable increase on the figure for 1919. There were 366 Males and 288 Females, giving a ratio of 127 to 100.

This shows a very different relationship between the number of births of the two sexes as compared with 1911, when the figures were 80 males to 100 females.

TABLE I.

WARDS.	Births.	Birth-rates.	Estimated Population as Middle of Year.
North-East	172	26'2	6,542
South-East	229	23'8	9,617
West	184	17'9	10,223
Milverton and Lillington	69	22'5	3,063
External	—	—	—
	654	22'2	29,445

Reference to Table I. shows that the Birth-rates in the North-East and Milverton and Lillington Wards show the greatest increase.

ILLEGITIMATE BIRTHS.

38 Illegitimate Births were registered during the year. This figure and the corresponding rates are compared with those for previous years both during and before the War.

Year.	All Births.	Illegitimate Births.	Illegitimate Birth-rate.	Percentage of all Births.
1910	- 414	- 18	- '66	- 4'3
1911	- 463	- 31	- 1'16	- 6'7
1912	- 477	- 31	- 1'16	- 6'5
1913	- 459	- 22	- '82	- 4'7
1914	- 441	- 27	- 1'0	- 6'1
1915	- 460	- 36	- 1'38	- 7'8
1916	- 442	- 32	- 1'14	- 7'2
1917	- 390	- 39	- 1'26	- 10'0
1918	- 429	- 42	- 1'36	- 9'8
1919	- 456	- 29	- '90	- 6'3
1920	- 654	- 38	- 1'22	- 5'5

It must be noted that it is not possible to make a proper comparison unless the rates are estimated per 1,000 unmarried and widowed females aged 15 to 45 years, and these figures are not available for Leamington.

MARRIAGES.

The number of Marriages during the year was 276. This includes all marriages in the Churches and all marriages in the Chapels having an authorised parson; but with regard to marriages registered by the Registrar, only including those where the male party resided in Leamington. If we could claim them all, the marriage rate would be 9·3 per 1,000 living.

The number of persons married in England and Wales in 1920 was 759,316, or 379,658 couples, and this constitutes a record, this 300,000 mark only having been passed on two previous occasions viz., 1915 and 1919.

DEATHS.

The number of Deaths registered in this district during 1920 was 392. Of these, 77 were deaths of non-residents. On the other hand, 69 deaths of persons belonging to the Borough were registered elsewhere. The figures thus corrected, the nett number of deaths belonging to the Borough was 384, giving a Death-rate of 13·04 per 1,000.

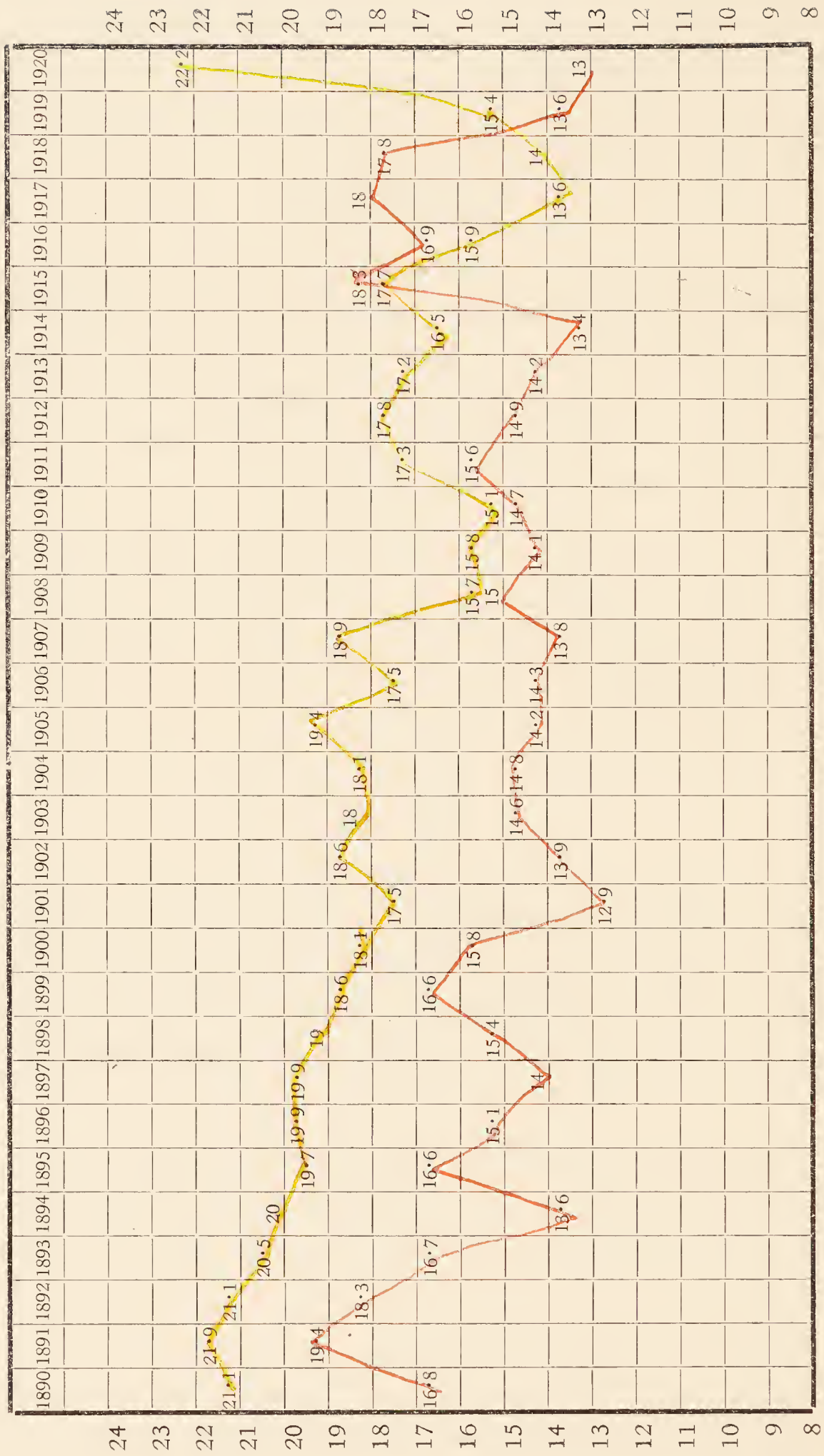
The Death-rate for Leamington Spa, corrected for age and sex distribution, by the figure computed 1913 by the Registrar-General, but which now probably requires considerable correction was 10·83 per 1,000.

The average age at death was 63·5.

The 188 deaths of persons over 65 years may, with interest, be analysed as follows :—

Age at Death : 65-75.		75-85		85 and over.
76	...	82	...	30

Chart Showing Birth-Rate (Yellow Line) and Death-Rate (Red Line) per 1,000 in Leamington since 1890.



The Yellow Line shows the Birth-Rate.

The Red Line shows the Death-Rate.

INQUESTS.

31 Inquests were held: 21 on males, and 10 on females. The findings of the Jury were as follows:—

Accidental Deaths...	...	...	12
Natural Causes ...	...	...	8
Stillbirths ...	...	...	1
Premature Births ...	...	...	1
Suicide (Temporarily Insane)	...	...	6
Found Drowned ...	...	...	3

TABLE II.
POPULATION, BIRTH, AND DEATH-RATES
FROM 1890 TO 1920.

Year.	Estimated Population.	Birth-rate per 1000.	Death-rate per 1000.	Infantile Mortality.	Zymotic Death-rate.
1890	24,871	21·1	16·8	156·1	0·40
1891	26,930	21·9	19·4	150·8	0·50
1892	27,016	21·1	18·3	124·3	0·80
1893	27,116	20·5	16·7	149·0	0·60
1894	27,220	20·0	13·6	142·8	0·30
1895	27,220	19·7	16·6	136·0	0·20
1896	27,320	19·9	15·1	127·0	0·40
1897	27,320	19·9	14·0	106·6	0·40
1898	27,520	19·0	15·4	145·3	0·90
1899	27,520	18·6	16·6	142·0	0·30
1900	27,700	18·1	15·8	131·3	0·30
1901	26,888	17·5	12·9	99·5	0·20
1902	26,967	18·6	13·9	113·3	0·40
1903	27,017	18·0	14·6	125·2	0·25
1904	27,060	18·1	14·8	123·9	0·18
1905	27,100	19·4	14·2	102·6	0·36
1906	27,140	17·5	14·3	126·0	0·51
1907	27,207	18·9	13·8	112·6	0·22
1908	27,217	15·7	15·0	84·1	0·33
1909	27,252	15·8	14·1	101·8	0·40
1910	27,360	15·1	14·7	74·9	0·44
1911	26,739	17·3	15·8	88·5	0·67
1912	26,690	17·8	14·9	73·3	0·07
1913	26,671	17·2	14·2	80·6	0·63
1914	26,652	16·5	13·4	86·1	0·49
1915	25,912	17·7	18·3	95·6	1·07
1916	27,888	15·9	16·9	74·7	0·14
1917	25,654	13·6	18·0	87·2	0·58
1918	30,730	14·0	17·8	72·2	0·18
1919	29,498	15·4	13·6	52·6	0·06
30 years'	Average	17·9	15·4	109·5	00·4
1920	29,445	22·2	13·04	62·6	00·27

STILL-BIRTHS.

32 Notices were received from the Borough Treasurer, acting as Registrar of Cemeteries, of which 18 were males and 14 females, one of each sex being illegitimate. The deaths, as far as could be ascertained, were due to Difficult Labour 8, Shock 3, Previous History 4, Ante Partum Hæmorrhage 2, Bad Health of Mother 6, Unattended Birth 2, Not Known 7.

INFANTILE MORTALITY.

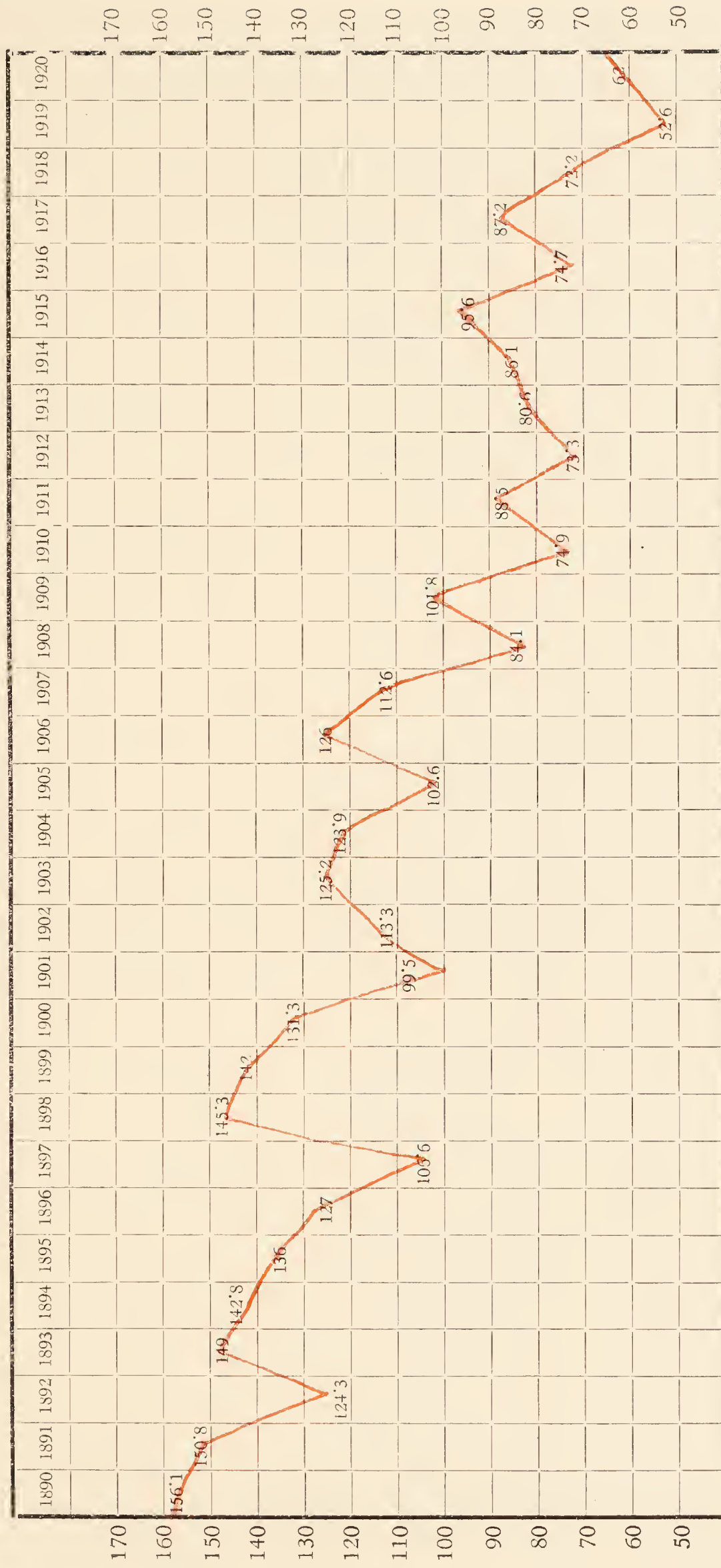
Reference to Table II. will show that the Infantile Death Rate is higher than the abnormally low figure of last year. This figure, however, compares most favourably with other Districts, and must give great encouragement to those who have spent so much time and trouble in connection with Infant Welfare Work in the Borough.

It will be further seen in the above Table that the average rate for the last 30 years is 109·5 per 1,000 Births, as compared with that of 62·6 in the past year.

TABLE III.
INFANTILE MORTALITY RATES.

Year.		Leamington Spa.		England and Wales.
1900	-	131	-	154
1901	-	99	-	151
1902	-	113	-	133
1903	-	125	-	132
1904	-	123	-	146
1905	-	102	-	128
1906	-	126	-	133
1907	-	112	-	118
1908	-	84	-	121
1909	-	101	-	109
1910	-	74	-	106
1911	-	88	-	128
1912	-	73	-	95
1913	-	80	-	109
1914	-	86	-	105
1915	-	97	-	110
1916	-	75	-	91
1917	-	87	-	97
1918	-	72	-	97
1919	-	52	-	89
1920	-	62	-	80

Chart Showing Infantile Mortality per 1,000 Births in Leamington since 1890.



The neonatal deaths, i.e., deaths of children under 4 weeks of age numbered 19, nearly one-third of the whole number.

The principal causes of these early deaths are (1) Prematurity, (2) Congenital Disease, such as Syphilis, (3) Deformity or abnormality such as Spina Bífida, Hydrocephalus, etc.

These cases are, unfortunately, those over which a Sanitary Authority's activities have little effect.

The Chart shows graphically how great the fall has been, more especially during the last decade.

TABLE IV.
CAUSES OF INFANT MORTALITY, 1914 to 1920.

	1914	1915	1916	1917	1918	1919	1920	Total Deaths 7 years.	Rate per 1000 Births
Marasmus... ..	6	6	3	6	4	2	4	31	8·2
Premature Birth ...	7	8	7	6	6	10	15	59	21·8
Bronchitis... ..	2	5	2	4	3	2	3	21	4·3
Pneumonia	2	12	2	3	3	...	5	27	7·2
Convulsions	1	1	3	2	3	1	2	13	2·9
Congenital Defects ...	1	2	2	4	1	2	3	15	4·3
Diarrhœal Diseases ...	7	2	2	1	1	2	5	20	7·2
Whooping Cough... ..	1	...	...	...	2	...	...	3	...
Overlaying ... ..	...	1	...	...	...	...	...	1	...
Measles	1	3	...	...	...	1	...	5	...
Non-Tuberculous Men'gitis	1	1	1	...	...	2	1	6	1·9
Tuberculous Meningitis ...	...	...	1	...	1	...	...	2	...
Tuberculous Peritonitis ...	2	...	...	...	1	...	1	4	1·9
Syphilis ... ..	...	...	1	...	...	...	...	1	...
Erysipelas... ..	...	...	...	...	...	...	...	...	...
Other Causes	7	3	9	8	6	2	2	37	2·9
Total Deaths below 1 year	38	44	33	34	31	24	41	245	
Rate per 1000 Births ...	86·1	95·6	74·7	87·2	72·2	52·6	62·6	74·1	

Illegitimate children, contrary to expectation, show a lower Death-rate than the others, this Death-rate being 52·6 per 1,000 Illegitimate Births.

MATERNITY AND CHILD WELFARE.

There continues to be a marked increase in this work, and the Ministry of Health have expressed the opinion that the appointment of another Health Visitor will shortly be necessary.

Of Miss Pierce's work in this direction it is impossible to speak too highly. Her intimate knowledge of the life and social conditions of those she visits renders her work of exceptional value.

VISITING.

During the year, 2,545 visits were paid to 571 babies, and 1,169 to older children. A complete card record of all visits and conditions found has been kept, and the following result of investiga-

tions is reported:—Breast fed, 386; partly breast fed, 79; and bottle fed, 69. Five children lived only a few days; 32 were still-born; and 115 were not visited.

174 visits were paid to expectant mothers, and 919 other visits to mothers.

Of 654 births, 323 were attended by Medical Practitioners, and 331 by Midwives only.

INFANT FEEDING.

The Council has continued to supply Glaxo on special terms through the Infant Health Society, and has thereby been able to sell Glaxo at a reduced price—or to supply free in suitable cases—as empowered by the Milk (Mothers and Children) Order. Under this arrangement, 6,558 lbs. have been sold at cost price, 34 lbs. have been sold at reduced price, and 310 lbs. have been given free. This scheme has undoubtedly been of great advantage under the conditions of dear milk which have continued to prevail.

Also under the above Order, the Council has made arrangements to provide for dinners to poor expectant mothers, and 60 dinners in 4 cases have been so provided. To anyone who has been privileged to see the vast improvement in these cases when supplied with suitable food, the great advantage and necessity of this scheme will be obvious.

MATERNITY CASES.

Under the arrangement entered into between the Council and the Warneford Hospital whereby on payment of an annual fee, together with a fixed charge per head, 3 beds are retained for maternity cases, 6 women (3 married and 3 single) were admitted for confinement.

As suggested in the Circular “Maternity and Child Welfare 4,” the cases are to be confined to the two classes: (1) Cases of Difficult Labour and (2) Cases of Normal Labour where the Medical Officer of Health is of opinion that the home conditions are unsuitable.

HOME NURSING.

By agreement with the District Nursing Association, the following children have been visited :—

	Cases.	Visits.
Pneumonia 	12 ...	145
Ophthalmic Neonatorum	1 ...	68

This work has been of great value, and has been very well carried out.

INFANT HEALTH SOCIETY.

The weekly meetings are well attended, and are fulfilling their object in arousing the interest of the mothers in matters which would at one time have been dismissed without a thought. Critics have said that we do not get at these meetings those mothers who need advice the most. This may be true to some extent, but even if we get a certain number, the resultant good is well worth striving for, and the best mothers are none the worse for further advice or help, and are most grateful for any assistance we can give.

254 babies, of whom 175 were born in 1920, were brought to the Infant Welfare Centre, and there were 1754 weighings.

THE DAY NURSERY.

It is with much regret that the Committee of the Day Nursery after careful consideration have decided to close the Nursery, as, owing to the small daily attendance, it is felt that the need for this Institution no longer exists.

The average daily attendance was only 11.

THE BABY SHOW.

The Show of 1920 continued the series of successes of the four previous years. The approval of the Health Committee was shown by their payment of the expenses. The thanks of all are due to Mrs. Holt and her various helpers for the great trouble they took in the matter.

MILK (MOTHERS AND CHILDREN) ORDER.

Dinners to expectant mothers were granted on the order of the Medical Officer of Health in 4 cases. Arrangements have been made with a Restaurant in the town. By this means we were assured that the expectant mothers were actually getting the food. The results of this arrangement were most satisfactory, and those who had the food were obviously improved by the grant.

Dried Milk was continued to be sold at the meetings of the Infant Health Society to those who could not afford to pay the full retail price. Furthermore, one was enabled to lay in a stock to sell at such time as cows' milk was short, and so help many mothers to tide over the shortage.

The extent to which this privilege was taken advantage of is indicated by the following figures :—

			Lbs.
Dried Milk sold	...	...	6558
„ „ at reduced price			34
„ given free	...	...	310
Total Dried Milk			<hr/> 6902 <hr/>

In other words, over three tons of dried milk were disposed of. This, I think, indicates that this work is most essential.

CAUSES OF DEATH IN LEAMINGTON SPA.

(From General Register Office, Somerset House).

Causes of Death.					Males,	Females,
	All Causes	...	...	...	193	189
1	Enteric Fever	...	...	...	—	—
2	Smallpox	...	...	...	—	—
3	Measles	...	...	...	—	1
4	Scarlet Fever	...	...	...	—	1
5	Whooping Cough	...	...	...	—	1
6	Diphtheria and Croup	...	...	...	2	2
7	Influenza	...	...	...	5	3
8	Erysipelas	...	...	...	1	—
9	Pulmonary Tuberculosis	...	...	...	9	12
10	Tuberculous Meningitis	...	...	...	1	2
11	Other Tuberculous Diseases	...	...	...	5	4
12	Cancer, Malignant Disease	...	...	...	17	18
13	Rheumatic Fever	...	...	...	—	—
14	Meningitis	...	...	...	—	1
15	Organic Heart Disease...	...	...	...	21	25
16	Bronchitis	...	...	...	13	12
17	Pneumonia (all forms)	...	...	...	14	8
18	Other Respiratory Diseases	...	...	...	1	3
19	Diarrhoea, &c. (under 2 years)...	...	...	...	3	2
20	Appendicitis and Typhlitis	...	...	...	—	—
21	Cirrhosis of Liver	...	...	...	—	2
21A	Alcoholism	...	...	...	—	—
22	Nephritis and Bright's Disease	...	...	...	5	14
23	Puerperal Fever	...	...	...	—	—
24	Parturition apart from Puerperal Fever	...	...	...	—	—
25	Congenital Debility, &c.	...	...	...	17	6
26	Violence, apart from Suicide	...	...	...	8	1
27	Suicide	...	...	...	—	6
28	Other defined Diseases...	...	...	...	71	64
29	Causes ill-defined or unknown...	...	...	...	—	1

CASES OF COMMONER INFECTIOUS DISEASES
NOTIFIED FROM 1900 TO 1920 (21 YEARS).

Year.	Scarlatina.	Diphtheria and Membr. Croup.	Enteric Fever.	Puerperal F.	Erysipelas.	Tuberculosis.	Totals.
1900	40	16	12	...	33	...	101
1901	113	5	14	1	41	...	175
1902	96	15	8	...	43	22	184
1903	80	16	2	...	47	9	155
1904	75	7	4	1	25	5	117
1905	22	11	6	...	24	1	64
1906	91	28	2	1	24	1	147
1907	83	24	4	...	21	1	133
1908	79	38	1	...	21	1	140
1909	24	73	2	1	24	1	125
1910	18	31	...	...	18	1	68
1911	34	3	1	1	12	23	74
1912	19	7	1	...	10	37	74
1913	92	33	2	...	9	55	191
1914	58	32	3	...	4	58	155
1915	42	27	3	...	9	60	141
1916	20	30	1	...	15	72	138
1917	22	21	1	1	10	72	127
1918	18	29	1	2	5	73	128
1919	13	7	4	...	5	56	289
1920	42	24	2	...	10	45	123

TABLE VII.

CASES OF NON-NOTIFIABLE INFECTIOUS DISEASE
REPORTED IN EACH MONTH OF THE YEAR 1920.

			Whooping Cough.	Chicken- pox	Mumps	Ringworm	Impetigo	Scabies	Measles	Totals
January	...	...	8	5	4	10	17	20	21	85
February	...	...	5	1	...	3	5	10	19	43
March	...	...	8	1	1	18	19	14	12	73
April	...	...	3	1	1	11	20	6	4	46
May ...	...	...	8	2	1	8	9	5	8	41
June	...	...	2	6	...	16	6	5	64	99
July ...	...	...	...	3	...	8	10	3	69	93
August	...	...	...	...	...	...	...	...	26	26
September	...	...	2	7	...	12	23	9	11	64
October	...	...	2	12	...	6	20	3	5	48
November	...	...	...	21	...	7	46	1	23	98
December	...	...	...	5	...	5	36	5	8	59
			38	64	7	104	211	81	270	775

NOTIFICATION OF INFECTIOUS DISEASES.

The Diseases now Notifiable under the Notification of Infectious Diseases Act are as follows :—

Smallpox.	Cerebro Spinal.
Cholera.	Acute Poliomyelitis.
Diphtheria.	Ophthalmia Neonatorum.
Membranous Croup.	Polio Encephalitis.
Erysipelas.	Encephalitis Lethargica.
Scarlatina, or	Glanders.
Scarlet Fever.	Anthrax.
Typhus.	Tuberculosis, Pulmonary.
Paratyphoid.	Tuberculosis, Non-Pulmonary.
Enteric Fever.	Malaria.
Relapsing „	Dysentery.
Continued „	Trench Fever.
Puerperal „	Acute Primary Pneumonia.
Plague.	Acute Influenzal Pneumonia.

It is to be regretted that the Ministry of Health saw fit at the end of 1919 to rescind the order of the Local Government Board of 1915 which placed Measles and German Measles on the list of Notifiable Diseases. The importance of these Diseases both as a cause of heavy Mortality among young children, and in many cases as a pre-disposing factor to other Diseases, more especially Tuberculosis and Pneumonia, has long been recognised. Thanks, however, to the co-operation of the School Teachers and visits of the School Nurse and Health Visitor a large percentage of the cases occurring in this Town are reported to this Department.

SCARLET FEVER.

The number of cases occurring during the year was 42 which is higher than that for the previous 4 years, and the same number as in 1915. 41 cases were removed to Heathcote Hospital. Only one death was recorded. There were no “return” cases.

DIPHTHERIA.

24 Cases were notified, with 4 deaths, giving a Death Rate of 16 per cent. Of these cases 18 were sent to Heathcote Hospital.

As far as possible all contacts have been swabbed. The distribution was as under :

West Ward.		N.E. Ward.		S.E. Ward.		Milverton and Lillington.
2	...	7	...	6	...	9

ENTERIC FEVER.

2 Cases of this Disease were notified, having occurred in houses close to each other, but no source of infection could be traced. Both cases were of an extremely mild type, and were only detained in Heathcote Hospital for a short time.

PNEUMONIA.

Under the Public Health (Pneumonia, Malaria, Dysentery, etc.) Regulations of January, 1919, the following Diseases were made compulsorily notifiable:—

Malaria.

Dysentery.

Trench Fever.

Acute Primary Pneumonia.

Acute Influenzal Pneumonia.

During the year ending December 31st, 1920, notifications of these Diseases are as follows.

Acute Primary Pneumonia, 18; Acute Influenzal Pneumonia, 11; giving a total of 29.

No cases of Malaria, Dysentery or Trench Fever were notified.

ERYSIPELAS.

Notifications of this Disease numbered 10.

ACUTE ENCEPHALITIS LETHARGICA.

One notification of this Disease was recorded in December, 1920, under the Regulations of December, 1918. The notification of this Disease was made compulsory in the first instance for one year, but this time has now been extended indefinitely by the Ministry of Health.

SMALLPOX.

No cases of Smallpox were notified in 1920, but Public Health Authorities cannot fail to view with dismay the large percentage of

children unvaccinated. On four occasions intimation was received by this Department from Port Sanitary Authorities of persons coming to the Borough who had been in contact with cases of Smallpox on Shipboard. The large number of persons returning from districts abroad where this disease is endemic, together with the fact that the time of transit from one place to another is being greatly reduced, more especially by means of an Air Service, render it highly improbable that Smallpox will not be introduced, and the increasingly large number of unvaccinated will provide a fruitful soil for the propagation and dissemination of the disease.

In a large number of cases vaccination is deferred through carelessness.

I do not believe that the really conscientious objector exists in large numbers, but I do feel sure that should an epidemic break out he will head the queue of those desirous of obtaining the protection vaccination undoubtedly confers.

VACCINATION.

From the return of the Vaccination Officer I am enabled to give the figures for vaccination of the children born from 1st July, 1919, to 30th June, 1920, viz. :

1.	No of babies registered for the 12 months ending June 30th, 1920	...	...	...	609
2.	No. of these births duly entered as being successfully vaccinated	...	...	...	169
3.	No. of these births duly entered as being exempted from vaccination	...	...	...	388
4.	Dead, unvaccinated	...	...	...	29
5.	Postponement by Medical Certificate	...	...	...	2
6.	Removed to other places	...	...	...	18
7.	Number of these births not accounted for in Vaccination Register	...	...	...	3

It will be thus seen that of 580 living children only 29 per cent. are known to have been vaccinated.

This compares most unfavourably even with the returns for the three groups of school children examined this year at the elementary schools where the percentage figure was 44, and even worse with the Secondary School figure which was 75 per cent.

No primary vaccinations or re-vaccinations were performed under the Public Health (Small Pox Prevention) Regulations, 1917, by the Medical Officer of Health.

MEASLES.

The number of cases of Measles unofficially notified was 270, with one Death.

The figures for the four years during which notification was compulsory were:—

1916	...	...	...	...	388
1917	...	...	...	...	556
1918	...	...	...	...	21
1919	...	...	...	...	204

OPHTHALMIA NEONATORUM.

4 Notifications (all from medical practitioners) were received. Of these, 3 were cured, and one was taken away shortly after birth.

The numbers are too small to be of any value as an index of the amount of venereal disease in the town.

INFLUENZA.

This Disease did not become epidemic again during the year. It was the cause, however, of eight Deaths.

WHOOPING COUGH.

38 Cases were brought to my notice, and one Death (female) was attributed to this Disease.

CANCER.

The Deaths ascribed to Malignant Disease numbered 33, classified in age groups as follows:—

		TABLE VIII.						
Age Group.		Male.		Female.		Total.		
30-40...	...	—	...	1	...	1		
40-50...	...	1	...	1	...	2		
50-60...	...	4	...	3	...	7		
60-70...	...	7	...	5	...	12		
70-80...	...	4	...	4	...	8		
80-90...	...	1	...	2	...	3		
		17		16		33		

For the past ten years the figures have been as follows:—

1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
51	47	38	41	42	40	52	47	30	33

TABLE IX.
DEATHS FROM CANCER,
TABULATED ACCORDING TO SITE.

Stomach, 5.	Breast, 6.
Bowel, 8.	Uterus, 2.
Liver, 3.	Throat, 4.
Miscellaneous, 5.	

Death rates per 1,000 Males is '57 as against '54 for Females.

TUBERCULOSIS.

45 cases were notified in the course of the year as follows :—

Private Medical Practitioner.	Ministry of Pensions.	Tuberculosis Officer.	Hospital.
17 	1 	20 	7

Notification of all forms of Tuberculosis was made compulsory in 1913. The number of Annual Notifications since that year with the subsequent Histories as far as can be ascertained is appended.

Year.	No. notified.	Still under observation.	Recovered or quiescent.	Not known.	Left Town.	Died.	
1913.	55	4	15	3	7	26	(47%)
1914.	58	4	13	3	9	29	(50%)
1915.	61	7	14	3	8	29	(48%)
1916.	71	13	18	5	14	21	(30%)
1917.	72	23	22	7	8	12	(17%)
1918.	76	25	12	8	9	22	(30%)
1919.	56	21	8	3	4	20	(36%)
	449	97	102	32	59	159	(36%)

The details of the 45 cases notified this year are as follows :—

WARD DISTRIBUTION.

Ward.	Cases Notified.	Deaths of those notified 1920.
South-East	25	6
North-East	6	1
West... 	12	3
Milverton and Lillington ...	2	—

SITE AND SEX.

	Pulmonary.	Non-Pulmonary.	Total.
Male ...	20	5	25
Female	14	6	20
	<hr/> 34	<hr/> 11	<hr/> 45

OCCUPATIONS.

School Children ...	5	Laundress ...	3
Discharged Soldiers	3	Printer ...	3
Factory Hands ...	5	Labourers ...	6
Domestic Workers	8	Railwayman	2
Bank Clerk...	1	Dressmaker	1
Postman ...	2	Chemist's Assistant	1
Chauffeur ...	3	No occupation	2

AGE INCIDENCE.

PULMONARY.

	Under 5	5-15	15-25	25-35	35-45	45-55	55 & over.	Total,
Male	—	—	4	4	5	4	3	20
Female	—	1	6	2	2	1	2	14

NON-PULMONARY.

Male	1	2	1	1	—	—	—	5
Female	—	1	2	1	1	—	1	6
	<hr/> 1	<hr/> 4	<hr/> 13	<hr/> 8	<hr/> 8	<hr/> 5	<hr/> 6	<hr/> 45

HOUSING.

Miss PIERCE reports as follows with respect to housing conditions found :—

Three-roomed Houses	2
Four-roomed Houses	13
Five-roomed Houses	7
Six-roomed Houses	2
Seven and over roomed Houses	5
Lodgings ...	8
Institutions	3
Not visited	5
	<hr/> 45

Of the cases notified this year 10 have died, two have left the Town, three cannot be traced and thirty remain under observation.

CONTROL OF TUBERCULOSIS.

Our work continues to be of the same character as in past years. Sputum Flasks and disinfectants are supplied on application, and the disinfection of premises is carried out whenever a patient dies or removes to another house.

The agreement with the County as regards the open Air Shelters was terminated during the course of this year, but the Shelters themselves have been repainted and are fit to be lent to any patient in the Borough should the need arise.

TREATMENT.

This work comes principally under the County Scheme. 17 (14 Males and 3 Females) cases have been sent to Sanatoria, 5 (3 males and 2 Females) admitted to the Warneford Hospital and 1 a female to Warwick Infirmary.

I am much indebted to the Assistant Tuberculosis Officer (Dr. French) for his kindness and help, more especially in the examination of suspected cases among School Children.

149 visits were paid to Tuberculosis cases by the Health Visitor.

WATER SUPPLY.

The Water supply of the district is derived from two sources, (a) The Campion Hill Well about three quarters of a mile from the centre of the town and, (b) The Lillington Well on the Rugby Road.

Both Wells are sunk in the Water bearing strata of the New Red Sandstone, and though somewhat hard the water is pure and excellent for potable purposes. A piped service direct to the houses supplies the whole District.

Since 1913 there has been very little variation in the amount used per head, the figures being :—

1913	...	...	26'1	gallons.
1914	...	...	26'22	„
1915	...	...	27'20	„
1916	...	...	26'26	„
1917	...	...	26'45	„
1918	...	...	26'48	„
1919	...	...	25'99	„

The present supply is just sufficient for the needs of the town, and leaves no margin for exceptionally dry weather. The extension of adits is therefore a matter for serious consideration.

The daily consumption per head for the past year was 26'32 gallons. The results of the Chemical Analysis made by Dr. Bostock Hill at the end of the year were as follows :—

	Campion Terrace.			Lillington.
Free and Saline Ammonia	0'002	...		trace
Albuminoid Ammonia	...	0'006	...	0'004
Chlorine in Chlorides	...	3'400	...	1'950
Nitrogen in Nitrates and Nitrates	...	0'220	...	trace
Oxygen absorbed from permanganate at 80 F in 4 hours	0'038	...
Total Solids dried at 100	...	68'000	...	38'000

HARDNESS.

Temporary	...	...	13'9	...	22'0
Permanent	...	...	11'1	...	20'8
Total	...	...	25'0	...	42'8

Samples of water have been sent regularly each quarter for Bacteriological examination, and invariably proved satisfactory.

Through the courtesy of the Borough Engineer I am enabled to give the following figures as regards the number of gallons of water supplied by meter per month and also the amounts of Sewage pumped during the year :—

WATER.

	Campion Terrace.	Lillington.	River.
January	10,926,000 gallons.	8,931,000 gallons.	1,271,400 gallons.
February	11,451,000 „	8,876,000 „	1,298,380 „
March	14,590,000 „	11,267,000 „	2,265,610 „
April	11,918,000 „	9,090,000 „	1,648,480 „
May	14,635,000 „	13,951,000 „	1,957,036 „
June	11,584,000 „	11,196,000 „	1,101,000 „
July	11,096,000 „	10,928,000 „	1,530,000 „
August	13,141,000 „	12,107,000 „	1,654,530 „
September	12,531,000 „	12,303,000 „	1,826,160 „
October	11,567,000 „	10,658,000 „	1,872,810 „
November	13,454,000 „	13,332,000 „	1,205,300 „
December	12,251,000 „	9,939,000 „	1,793,920 „

WATER MAINS.

For the distribution of the Water supply for Domestic Purposes some 35 Miles of Mains have been laid. In addition a little over 7 miles are used for supplying town water for flushing sewers, watering roads and other purposes.

SEWAGE PUMPED, 1st JANUARY—31st DECEMBER, 1920.

1st Quarter	...	...	88,639,550 gallons.
2nd Quarter	...	...	68,719,260 „
3rd Quarter	...	...	76,074,918 „
4th Quarter	...	...	96,222,473 „

The Sewage is disposed of by broad irrigation over farm land at Heathcote.

During the year several different methods of sewage purification have been examined by members of the Water and Sewage Committee and it is to be hoped that in the near future some more efficient system will be adopted, as undoubtedly the character of the effluent is at present at times not altogether satisfactory.

NUMBER OF LOADS OF HOUSE REFUSE DESTROYED.

January	...	...	...	781 loads
February	...	...	...	679 „
March	...	...	...	844 „
April	...	...	...	672 „
May	...	...	...	777 „
June	...	...	...	643 „
July...	...	...	...	612 „
August	...	...	...	650 „
September	...	...	...	718 „
October	...	...	...	602 „
November	...	...	...	729 „
December	...	...	...	606 „

TABLE X.

THE WORK OF THE MUNICIPAL LABORATORY
FOR 1920.

			1920
SWABS from Throats, examined for Diphtheria			
Positive	...		34
Negative	...		201
Doubtful	...		11
SPUTA, examined for Tubercle.			
Positive	...		13
Negative	...		57
Doubtful	...		—
BLOOD, examined for Typhoid.			
Positive	...		—
Negative	...		8
Doubtful	...		—
Other Examinations and Preparations	...		13
			337

HOUSING.

One of the outstanding problems in Public Health is that of Housing. In a survey in 1919 under the Housing and Town Planning Act, the Housing needs of this town were estimated to be as follows :—

(a) To meet the unsatisfied demand for houses (taking into account growth of population, overcrowding, etc.)	...	...	...	...	...	...	...	290
(b) Replace other dwellings that are unfit for human habitation and cannot be made fit	...	...	...					79
(c) Replace obstructive and other buildings (now inhabited and not included under (b)) which should be demolished	...	...	...	...	...	...	...	10
(d) Meet anticipated deficiencies	...	...	...					150
								<hr/> 529 <hr/>

As this estimate was made nearly two years ago it is probable that the actual requirements of the town are considerably greater.

A certain number of houses that at the date of survey might have been made habitable would now probably be included in (c).

To meet this shortage 132 houses are under course of erection at the Tachbrook Road site and 34 at Leicester Street.

As, however, of these only 14 at the former and 8 at the latter were completed by the 31st December, 1920, it is difficult to be optimistic about the prospect of much immediate relief.

The new Rent Restriction Act of 1920 became law on July 2nd and is now the only Act on this subject in force.

No applications under this Act were made to the Sanitary Authority during the year.

SANITARY WORK OF THE YEAR, 1920.

250 complaints were received during the past year, 115 being from No. 1 District, and 135 from No. 2.

198 Notices were served in No. 1 District, and 125 in No. 2 District. Of these notices 1 was statutory.

255 notices were complied with during the year, and 68 are still outstanding.

Some of the notices complied with were outstanding at the end of 1919.

SUMMARY OF WORK EXECUTED.

Complaints received	...	...	...	...	...	250
Inspection of Work in progress	...	...	...	...	...	849
Re-inspections in Relation to Nuisances under notice	...	...	...	...	...	312
Visits in Relation to Notifiable Infectious Diseases...	...	...	...	...	...	114
Visits in Relation to Non-notifiable Infectious Diseases	...	...	...	...	...	48
Patients removed to Heathcote Hospital	...	...	...	...	...	49
House Fumigations	...	...	...	...	...	97
Steam disinfections	...	...	...	...	...	115
Notices to Librarian of Infected Houses	...	...	...	...	...	50
Visits to Tents, Sheds, Vans, &c.	...	...	...	...	...	290
Inspections of Factories and Workshops	...	...	...	...	...	130
„ Bakehouses	...	...	...	...	...	102
„ Laundries	...	...	...	...	...	27
„ Outworkers' Premises	...	...	...	...	...	20
„ Common Lodging Houses	...	...	...	...	...	136
„ Slaughterhouses	...	...	...	...	...	678
„ Cowsheds, Dairies, and Milkshops	...	...	...	...	...	159
„ Food Shops and Premises	...	...	...	...	...	1206
Visits to Offensive Trade Premises	...	...	...	...	...	55
Smoke Tests	...	...	...	...	...	48
Water Tests	...	...	...	...	...	36
Samples of Foods and Drugs taken for Analysis	...	...	...	...	...	93
Drains Cleansed	...	...	...	...	...	52
„ Repaired	...	...	...	...	...	28
„ Reconstructed	...	...	...	...	...	36

New Drain Ventilators fixed	...	...	...	...	...	9
New Soil-pipes and Ventilators	...	...	...	...	...	5
Soil-pipe Ventilators repaired or renewed	...	...	...	...	...	9
Intercepting Traps fixed	...	...	...	...	...	11
Inspection Chambers built	...	...	...	...	...	—
Fresh-air Inlets provided	...	...	...	...	...	10
New Gullies fixed	...	...	...	...	...	61
New W.C. Pans and Traps fixed	...	...	...	...	...	33
W.C. Pans cleansed	...	...	...	...	...	12
Flushing Cisterns provided	...	...	...	...	...	30
W.C.'s repaired, (Floors, Walls, Ceilings, and Roofs) and cleansed	...	...	...	...	...	14
New Glazed Sinks fixed	...	...	...	...	...	26
Sinks repaired, and new Waste Pipes fixed	...	...	...	...	...	4
Houses repaired (Walls, Ceilings, Floors, and Roofs)	...	...	...	...	...	75
Houses cleansed (Walls and Ceilings)	...	...	...	...	...	—
House spouting renewed	...	...	...	...	...	21
House spouting disconnected	...	...	...	...	...	2
Soft-water Cisterns cleansed	...	...	...	...	...	6
Sanitary Receptacles provided	...	...	...	...	...	26
Boundary walls repaired	...	...	...	...	...	3
Yards re-paved or repaired	...	...	...	...	...	5
Nuisances from Animals abated	...	...	...	...	...	6
Nuisances, accumulations of Manure, etc., abated	...	...	...	...	...	18
Workshops cleansed	...	...	...	...	...	3
Bakehouses cleansed	...	...	...	...	...	5
Laundries cleansed	...	...	...	...	...	3
Vehicles disinfected (Swine Fever Order)	...	...	...	...	...	140
Samples of Well Water taken for Analysis	...	...	...	...	...	12

SLAUGHTER-HOUSES.

The 21 Slaughter-Houses in the Borough, of which 6 are licensed, and 15 registered, are distributed as follows:—

No. 1 District ... 1 Licensed ; 8 Registered.

No. 2 „ ... 5 „ 7 „

Limewashing has been carried out regularly and offal and garbage have been removed within the stipulated time. 678 visits were made during the year.

Two of the licensed Slaughter-Houses are used by four occupiers.

Having regard to the situation and structural arrangements of most of the Slaughter-Houses in the town, it is evident that the Trade is not carried out under the best conditions.

The Butchers have given your Inspectors great assistance in preventing the sale and consumption of meat which was diseased or otherwise unfit for human food. Our advice is sought and acted upon to the mutual advantage of Butcher and Consumer. It should, however, engage the attention of this Authority that although frequent visits are made to all the Slaughter-Houses, it is quite impossible under existing conditions to ensure the thorough inspection of all meat intended for human consumption.

There has been a great improvement in the quality of meat coming into Leamington Spa since the decontrol.

SLAUGHTERING.

Out of 21 Butchers in the Borough, only one Butcher has adopted the humane method of Slaughtering beasts. The other 20 still slaughter beasts by what is known as the Pole Axe method.

The humane method, which consists of shooting the animal before sticking is much to be preferred over the Pole Axe method in which the animal is stunned by a blow on the head and then stuck.

The humane method requires less skill in its use, it is more certain to stun immediately, and renders death practically painless.

It is much to be regretted that there is no legislation to enforce the use of humane killers.

The Board of Agriculture have issued the following leaflet :—
“THE HUMANE SLAUGHTER OF ANIMALS.

It cannot be too widely known that the Ministry of Agriculture is deeply concerned that the slaughter of animals should be humane. Since the Commission, over which the present Minister of Agriculture presided, sat in 1904, there has been a steady awakening of the public conscience and a definite improvement in our methods of slaughter, but much remains to be done and the best efforts of the R.S.P.C.A. and the Council of Justice to Animals, to name only two associations that seek to deal with the matter, have not availed

to introduce into England the Abattoir System which prevails on the Continent and has done so much to make slaughtering humane. We have in our midst to-day thousands of private Slaughter-Houses over which the supervision is demonstrably unsatisfactory and incomplete, and the Ministry is making a determined effort to impress upon butchers throughout the country the advisability on all grounds of killing by humane methods. While it is admitted that the pole-axe in the hands of a skilled man is most effective, we have to remember that all who handle that weapon must become skilled by practice. The ordinary methods of killing, especially in the case of calves and pigs, leave much to be desired on the score of humanity, and now the Minister has issued instructions that all Inspectors in the Ministry's employment are to see that slaughtering on account of outbreaks of disease is carried out humanely, and by the aid of either humane killers or, in suitable cases, shot guns. With the approval of the Treasury, nearly 300 humane killers, together with the necessary ammunition, have been purchased for the use of Inspectors. Explicit instructions have been issued that all officers—permanent or temporary—who are compelled to slaughter animals (as in cases of Foot-and-Mouth Disease) are to employ the most humane methods. Officers are further charged to see that any butchers employed by them are to observe the same principles. The Minister has further given instructions that all officers of the Ministry—permanent or temporary—are to regard themselves as propagandists of humane methods of slaughter throughout the country, and the main principle to be kept in view by all concerned is that every animal should be properly stunned before it is bled. There are several humane killers on the market and the Ministry has adopted one by Messrs. Greener, of Birmingham, which takes the form of a pistol firing a '22 hollow nosed bullet, in cartridges both long and short, and is generally speaking capable of stunning sheep and pigs of anything up to 24 stone in weight. Where affected cattle are to be destroyed in the preliminary stage of an outbreak of Foot-and-Mouth Disease, veterinary surgeons are advised to employ a shot gun, because the effect of a charge of shot is immediate, the charge entering the brain as a solid mass and immediately spreading, thereby destroying all sensation. The widest publicity is sought for these principles of humane treatment of animals, so long neglected in this country from a variety of causes, and it is to be hoped that people who find themselves in agreement with the view taken by the Ministry, that animals must be spared all unnecessary suffering, will themselves become propagandists on behalf of dumb creation and will appeal to the butchers who supply them to take steps to come into line with those whose practice is humane. It is only by the united action of all who are concerned with the proper treatment of our livestock that improvement in the bad existing conditions can be brought about.

From the General Service of the
 Ministry of Agriculture,
 September 18th, 1920."

DISEASED AND UNSOUND FOOD SEIZED
OR SURRENDERED.

Apricots, 1 tin	...	...	...	Decomposition.
Bacon, 117 $\frac{3}{4}$ -lbs.	...	...	...	"
Beef (frozen) 38-lbs.	...	...	...	Unsound.
Beef (corned) 16 tins	...	...	...	Decomposition.
Beasts' Carcases and Offal, 3	...	...	...	Generalised Tuberculosis,
" " " 1	...	...	...	Hydremia,
" " " 1	...	...	...	Traumatic pericarditis.
Beef, one side	...	...	...	Parturient Septicemia,
Beast's forequarter and head, 1	...	...	...	Tuberculosis.
Beasts' Tongues, 2	...	...	...	Actinomycosis.
Cod, 33-lbs.	...	...	...	Decomposition.
Dates, 1 box	...	...	...	"
Fish paste, 11 pots	...	...	...	"
Ham, 114 $\frac{1}{2}$ -lbs.	...	...	...	"
Haddock, 34-lbs.	...	...	...	"
Hake, 64-lbs.	...	...	...	"
Herrings, 4 barrels	...	...	...	"
Herrings, 72-lbs.	...	...	...	"
Kippers, 31-lb.	...	...	...	"
Lobsters, 1 box	...	...	...	"
Milk, 65 tins	...	...	...	Unwholesome.
Pears, 1 tin	...	...	...	Decomposition.
Peaches, 1 tin	...	...	...	"
Pig's Carcase and Offal, 1	...	...	...	Septic Metritis.
Pork pies, 22	...	...	...	Decomposition.
Rabbits, 19	...	...	...	"
Rabbits (frozen), 24	...	...	...	"
Salmon, 8 tins	...	...	...	"
Salmon, 16 $\frac{1}{2}$ -lbs.	...	...	...	"
Salmon (Rock), 4 stone	...	...	...	"
Sheep's carcase, 1	...	...	...	Unsound and Emaciated.
Sheep's kidneys, 96	...	...	...	Decomposition.
Sheep's Lungs, 1	...	...	...	Pseudo Tuberculosis.
Shrimp Paste, 2 pots	...	...	...	Decomposition.
Tomatoes, 52 tins	...	...	...	"
Tomatoes, 4 boxes...	...	...	...	"
Turkeys, 2	...	...	...	"

PROSECUTION.

One side of Beef, affected with Parturient Septicemia, was seized and proceedings instituted against the Owner who was convicted and fined £10.

The remainder of the Meat and Foods in the foregoing list was voluntarily surrendered.

SALE OF FOOD AND DRUGS ACT.

The following samples were taken and submitted for analysis during the year :—

			Formal Samples.		Informal Samples.		Totals.
Butter	...	...	7	...	—	...	7
Cream	...	...	3	...	—	...	3
Cheese	...	...	—	...	1	...	1
Flour	...	...	1	...	—	...	1
Lard	...	...	3	...	—	...	3
Margarine	...	...	9	...	1	...	10
Milk ...	...	...	56	...	7	...	63
Rice ...	...	...	2	...	—	...	2
Sugar ...	...	...	2	...	—	...	2
Malt Vinegar ...	...	...	1	...	—	...	1
			—		—		—
			84		9		93
			—		—		—

Of the 63 samples of Milk taken, one was found to be deficient of 9% of solids not fat and contained 8'8% of fat. The vendor appeared before the Health Committee and gave an explanation. It was considered advisable in view of the abnormal quantity of cream that further proceeding should not be taken. The vendor was strongly cautioned as to his future supplies. Subsequent samples taken from the vendor in question proved to be genuine.

In consequence of a complaint received, two informal samples were taken from a farmer outside the Borough who supplies milk to a milkman who resides in the town. The results of the analyses of these two samples showed one to be adulterated with 4'5% of added water and the other with 8% of added water. Information was given to the County Inspector who obtained samples of milk from the farmer. One of these samples was found to contain 47% of added

water. Legal proceedings were taken at Warwick, when your Inspector appeared as witness for the County Inspector. The defendant was fined 3 guineas and costs.

Three samples of Milk were found to be down to the limit in fat and two fractionally below the limit in solids, not fat.

Two samples of Margarine contained 15% of moisture and one contained 0·2% of Boric Acid.

COMMON LODGING HOUSES.

The Common Lodging Houses in the Borough are situated in Satchwell Street and their number (viz. 2) has remained during the past year as in previous years.

There has been no reason to complain of the manner in which these houses were kept.

No cases of Infectious Diseases were reported by the keepers during the year.

136 visits were made during the course of the year.

OFFENSIVE TRADES.

There are two Offensive Trade premises in the Borough where Tripe Dressing is carried on.

Frequent visits made showed these premises to be kept in a satisfactory condition.

CANAL BOATS ACTS.

No. of Boats on Register December 31st, 1920	...	1
No. of Boats inspected during 1920	... ..	40
No. of Boats conforming to Acts and Regulations	...	35
No. of Boats infringing Acts and Regulations	...	5
No. of persons for which Cabins were Registered	...	122
No. of persons occupying Cabins	... ..	114

DETAILS OF INFRINGEMENTS FOUND AND REMEDIED.

Found.	Infringements.	Remedied.
2 ...	Absence of Certificates	2
1 ...	Boat required painting	1
2 ...	Boats dilapidated and required repairing	2
<hr/> 5		<hr/> 5

During the year 40 Boats were examined. Of these 35 were found to comply with the Canal Boats Acts and Regulations, whilst 5 were not doing so. In these five cases Notices were served on the Owners calling their attention to defects found. The five Notices were complied with.

The majority of the Boats inspected were found to be in good condition.

During the year two applications were received for Registration of Canal Boats with this Authority. The Boats however were eventually registered with another Registration Authority as suggested by your Committee.

WART DISEASE OF POTATOES ORDER, 1914, AND CORKY SCAB OF POTATOES ORDER, 1914.

One case of Wart disease of potatoes was reported occurring on a small allotment 60-ft. square. The potatoes affected were approximately 30 roots of "Arran Chief" on an area of 40ft. square.

Notices were sent to the Occupier of the Allotment and to the Ministry of Agriculture. The whole of the diseased potatoes were dug up and burned, and instructions given to the Occupier as to the planting of next season's varieties of potatoes which are considered immune from the disease.

AMERICAN GOOSEBERRY, MILDEW ORDER, 1911.

Frequent inspections were made to Greengrocer's Shops and Allotments, and Circulars relating to this Order have been delivered to the Chief Greengrocers in the Town.

No signs of the disease were found during the year.

MILK AND CREAM REGULATIONS, 1912-1917.

There were no Offences under these Regulations during the year.

63 Samples of Milk were submitted during the year.

The Borough Analyst reports that no preservatives were found in any of the samples submitted.

3 Samples of Cream were taken, 2 being sold as preserved cream. Of the latter, one contained 0·13% of Boric Acid and bore a label to the effect that it contained not more than 0·4%. The other was similarly labelled and was found to be genuine. One sample of cream contained 49% of Fat, and the other 40% of Fat.

No evidence of the addition of any thickening substance were found in the Samples of Cream, or Preserved Cream.

RAG FLOCKS ACT, 1911.

No samples of Rag Flock were taken during the year as it was found that only certified sterilised flocks were being used.

The danger to health by harbouring dirty rag flocks has been continually impressed upon the Upholsterers of the Borough.

FABRICS (MISDESCRIPTION) ACTS, 1913.

No cases were discovered where Shopkeepers were misleading the Public with regard to the sale of inflammable material.

FACTORIES AND WORKSHOPS ACTS.

The Sanitation of Workshops and Factories has received attention, and the few cases discovered where infringements of the Acts had occurred were dealt with by serving intimation notices.

It was not found necessary to serve Statutory Notices or institute legal proceedings.

OUTWORKERS.

Outworkers premises were visited during the year and found to be clean and properly kept.

1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.
Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises,	Number of		
	Inspection.	Written Notices.	Prosecutions.
Factories (Including Factory Laundries)	44	—	—
Workshops (Including Workshop Laundries)	188	5	—
Workplaces (Other than Outworkers' Premises included in Part 3 of this Report)	27	—	—
TOTAL	259	5	—

2.—DEFECTS FOUND.

Particulars.	Number of Defects			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
Nuisances under the Public Health Acts*:				
Want of cleanliness	5	5	—	—
Want of ventilation	—	—	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	—	—	—	—
Other nuisances	—	—	—	—
Sanitary accommodation ... {	insufficient	—	—	—
	unsuitable or defective	—	—	—
	not separate for sexes	—	—	—
Offences under the Factory and Workshop Acts:—				
Illegal occupation of underground bakehouse (s. 101)	—	—	—	—
Breach of special sanitary requirements for bakehouses (ss. 97 to 100) ...	—	—	—	—
Other Offences (Excluding offences relating to outwork which are included in Part 3 of this Report)	—	—	—	—
Total	5	5	—	—

*Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

3.—HOME WORK.

NATURE OF WORK.	Outworkers' Lists, Section 107.										Outwork in Unwholesome Premises, Section 108			Outwork in Infected Premises, Sections 109, 110			
	Lists received from Employers						Prosecutions		Notices served on Occupiers as to keeping or sending lists	Failing to keep or permit inspection of lists.	Failing to send lists	Instances	Notices served	Prosecutions	Instances	Orders made (Section 110)	Prosecutions (Sections 109, 110)
	Sending twice in the year		Sending once in the year		Lists		Outworkers										
	Lists	Con-tractors	Work-men.	Outworkers	Work-men.	Con-tractors	Work-men.										
Wearing Apparel— Making 	27	—	47	—	—	—	22	—	—	—	—	—	—	—	—	—	—
Furniture and Upholstery ...	2	—	2	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Locks, Latches and Keys ...	2	—	2	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Paper, etc., Boxes, Paper Bags	1	—	2	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Total ...	32	—	52	—	—	—	25	—	—	—	—	—	—	—	—	—	—

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
Important classes of Workshops, such as Workshop Bakehouses may be enumerated here.	
Bakehouses	48
Laundries	31
Dressmaking, Tailoring, Millinery, and other Workshops	235
Total number of Workshops on Register	314

5.—OTHER MATTERS.

Class.	Number.
Matters notified to H.M. Inspectors of Factories :—	
Failure to affix Abstract of the Factory and Workshop Acts, (s. 133, 1901)	—
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Acts (s. 5, 1901) ...)	Notified by H.M. Inspector 5
	Reports (of action taken) sent to H.M. Inspector 5
Other	—
Underground Bakehouses (s. 101) in use at the end of the year	5

METEOROLOGICAL REPORT, 1920.

The taking and reading of Meteorological conditions in the Borough has been continued morning and evening throughout the year. The following instruments are in use :—

AT THE PUMP ROOMS.

- (1) A Standard Fortin Barometer.
- (2) A Self-Recording Barograph.
- (3) A Campbell-Stokes Sunshine Recorder.
- (4) A Wind Vane and Anemometer.

IN THE PUMP ROOM GARDENS.

- (6) A Stevenson's Screen, containing a Hygrometer and a Maximum and 2 Minimum Thermometers.
- (7) One Solar Radiation Maximum Thermometer, Black bulb in vacuo.
- (8) One Solar Radiation Minimum Thermometer, Bright bulb in vacuo.
- (9) One Terrestrial Radiation Thermometer.
- (10) One 8in. Rain Gauge (Meteorological Office Pattern) with Measuring Glass.
- (11) One Earth Thermometer at a depth of 1 foot.
- (12) One Earth Thermometer at a depth of 2 feet.
- (13) One Earth Thermometer at a depth of 4 feet.

The Station is recognised by the Meteorological Office. A monthly report was sent throughout the year, and evening reports were sent by telegram.

EXTREMES FOR THE YEAR.

BAROMETER.—The highest reading (corrected to 32° F. and Mean Sea Level) was 30·70 on 5th February. The lowest reading was 28·74 on 15th March.

TEMPERATURE.—The highest temperature recorded in the shade during the year was 78° on the 25th May, and the absolute minimum was 11° on 13th December. The mean maximum for the year was 56·8, and the mean minimum for the year 41·7.

SUNSHINE.—As will be seen from Table XIII., there were 1099·4 hours of bright sunshine during the year. This gives a daily average of 3·00 hours. The maximum sunshine for one day was 15·5 hours on 9th June. The month yielding the most sunshine was June, with 179·9 hours, a daily mean of 5·9 hours.

RAINFALL.—During the year 26·71 inches of rain fell, distributed over 194 days. The wettest month during 1920 was July, with 4·27 inches, which was distributed over 25 days. November was the driest month with 0·69 in. of rain, which was distributed over nine days.

MONTHLY NOTES.

JANUARY.—The maximum temperature was 56° on the 12th, and the minimum was 23° on the 7th. The lowest daily maximum was 30° on the 6th, and the highest daily minimum was 47° on the 18th. 17 ground frosts were registered during the month. The total rainfall for the month was 2·15 ins., distributed over 20 days. The prevailing wind was South-West.

FEBRUARY.—The maximum and minimum shade temperatures were 62° on the 18th, and 25° on the 5th respectively. The lowest daily maximum was 38° on the 20th and 23rd, and the highest minimum 45° on the 2nd and 3rd. The total rainfall was 0·79 ins., distributed over 12 days. The prevailing wind was West. Snow fell on 1 day.

MARCH.—The maximum shade temperature for the month was 65° on the 22nd and 24th, and the minimum was 27° on the 8th. The lowest daily maximum was 34° on the 14th, and the highest daily minimum was 48° on the 28th. Snow fell on one day, viz., 15th. Rain fell on 19 days amounting to 2·36 ins. The prevailing wind was South-West.

APRIL.—The maximum shade temperature was 62° on the 23rd, and the minimum was 32° on the 30th. The lowest maximum was 46° on the 3rd and 4th, and the highest minimum was 48° on the 16th and 25th. This was a very wet month. Rain fell on 28 days and totalled 3·77 ins. The sky was completely overcast at 9 a.m. on 27 days. The prevailing wind was South-West.

MAY.—The amount of sunshine totalled 119·8 hours. The maximum shade temperature for the month was 78° on the 25th, which constituted the highest reading during the year, compared with 85° on 11th September last year. The lowest temperature was 32° on the 5th. Two ground frosts were recorded on the 5th and 10th. Rain fell on 17 days and totalled 2·34 ins. on the 5th. The lowest daily maximum was 52° on the 4th, and the highest minimum was 58° on the 29th. The prevailing wind was South-West.

JUNE.—This month yielded the maximum amount of sunshine with 179·9 hours, which is equal to a daily average of 5·9 hours. Rain fell on 9 days and totalled but 0·22 ins. The maximum shade temperature for the month was 73° on the 15th, and the minimum 39° on the 9th. The lowest daily maximum was 57° on the 4th, and the highest daily minimum was 60° on the 29th.

JULY.—The maximum temperature was 70° on the 16th, 19th, 20th and 31st, and the minimum was 42° on the 25th. The lowest daily maximum was 54° on the 5th, and the highest minimum was 59° on the 21st. Sunshine recorded during the month, 115·9 hours. Rain fell on 25 days, and totalled 4·27 ins. The prevailing wind was West.

AUGUST.—The maximum shade temperature was 72° on the 8th, 15th and 28th, and the minimum was 41° on the 20th. The lowest daily maximum was 57° on the 23rd, and the highest minimum 55°, on the 17th. Thunder was heard on one day. There were 113·3 hours of bright sunshine during the month. The rainfall was 1·38 ins. distributed over 12 days. The prevailing wind was West.

SEPTEMBER.—The maximum shade temperature was 73° on the 13th. The minimum shade temperature was 35° on the 20th. The lowest daily maximum was 54 on the 22nd, and the highest minimum was 54° on the 4th. The amount of bright sunshine recorded for the month was 92·7 hours. 2·54 ins. of rain fell, and was distributed over 15 days. The prevailing wind was South-West.

OCTOBER.—The maximum shade temperature was 72° on the 7th, and the minimum 32° on the 28th. The lowest daily maximum was 49° on the 27th and 28th, and the highest minimum was 53° on the 5th, 10th and 11th. Only 3 ground frosts were recorded. 88'9 hours of sunshine were recorded during the month. The rainfall was 2'23 ins., and distributed over 10 days. The prevailing wind was North-East.

NOVEMBER.—The maximum shade temperature registered during the month was 58° on the 14th, and the minimum was 24° on the 22nd. The lowest daily maximum was 34° on the 22nd, and the highest minimum 51° on the 15th. There were 47'1 hours of sunshine during the month. Rain fell on 9 days and totalled 0'69 ins. The prevailing wind was South-West.

DECEMBER.—The maximum shade temperature was 55° on the 24th, 26th and 31st, and the minimum 11° on the 13th, this being the lowest reading for the year. The lowest daily maximum was 25° on the 13th, and the highest daily minimum 47° on the 25th and 30th. The sunshine recorded for the month totalled 32'0 hours. The total rainfall was 1'97, and fell on 18 days. Snow fell on three days. The prevailing wind was South-West.



TABLE XI.
METEOROLOGICAL AVERAGES OF
LEAMINGTON SPA.

For the 40 Years, 1881—1920.

Month.	Means of Barom. 9 a.m.	Air Temperature.		Rainfall.	
		Max.	Min.	Inches.	Days.
January ...	29'89	44'5	33'2	2'57	21'2
February...	30'08	45'8	33'9	1'56	11'8
March ...	29'91	49'7	35'4	2'56	19'0
April ...	29'83	52'6	40'2	2'58	21'7
May ...	29'94	64'0	45'4	1'84	14'6
June ...	30'13	66'9	50'6	1'91	10'2
July ...	29'92	67'1	51'3	3'33	17'6
August ...	29'83	70'4	51'1	1'78	13'8
September	30'01	64'3	46'3	2'27	12'3
October ...	29'99	57'1	40'6	2'20	11'6
November	29'93	48'2	35'7	1'14	11'9
December	29'80	44'4	35'1	2'36	18'6
Means ...	29'93	56'2	41'5	26'10	184'3

TABLE XII.
PREVAILING WINDS AND NUMBER OF DAYS
PER MONTH.

(Observations taken at 9 a.m.)

YEAR 1920.

		Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
January ...	...	1	3	...	2	...	2	11	10	2
February...	...	9	...	2	...	...	3	5	6	4
March ...	...	7	2	1	2	1	...	7	6	5
April ...	...	3	1	...	5	1	2	9	4	5
May ...	...	4	...	...	5	3	...	8	5	6
June ...	...	7	...	...	8	...	...	2	6	7
July ...	...	6	1	...	...	...	2	6	10	6
August ...	...	7	...	6	...	...	2	2	9	5
September	...	11	...	2	3	...	...	9	3	2
October ...	...	19	...	5	4	2	...	...	1	...
November	...	9	...	...	4	3	1	11	1	1
December	...	12	...	2	1	...	1	10	3	2
Totals ...	...	95	7	18	34	10	13	80	64	45

TABLE XIII.
TABLE OF METEOROLOGICAL OBSERVATIONS, LEAMINGTON SPA, 1920.
Latitude 52° 18' N. Longitude 1° 30' W.

Month.	Means of Barom. 9 a.m.	AIR TEMPERATURES.										EARTH TEMPERATURES.			Direction of the prevailing Wind.	Rainfall.		Sunshine.
		Means.						Absolute Temperatures.				At 1 foot.	At 2 feet.	At 4 feet.		Inches.	Days.	
		9 a.m.	Max.	Min.	Max.	Date.	Min.	Date.										
January ...	29.91	41.8	47.3	34.1	56	on 12th	23	on 7th				41.6	...	46.2	S.W.	2.15	20	51.4
February ...	30.19	42.3	49.6	35.5	62	„ 18th	25	„ 5th				41.4	...	46.3	W.	0.79	12	64.5
March ...	29.95	46.4	52.9	37.3	65	„ 22nd&24th	27	„ 8th				44.0	...	46.6	S.W.	2.36	19	118.9
April ...	29.66	47.8	53.0	41.5	62	„ 23rd	32	„ 30th				50.2	...	49.0	S.W.	3.77	28	75.0
May...	30.01	56.0	62.4	45.3	78	„ 25th	32	„ 5th				57.4	...	51.9	S.W.	2.34	17	119.8
June ...	30.02	60.7	66.8	50.8	73	„ 1st	39	„ 9th				64.8	...	57.4	E. & N.W.	2.22	9	179.9
July ...	29.87	58.4	65.3	50.4	70	„ 16th, 19th, 20th & 31st	42	„ 25th				63.8	...	59.1	W.	4.27	25	115.9
August ...	30.10	58.0	68.1	48.7	72	„ 8th, 15th & 28th	41	„ 20th				62.3	...	59.4	W.	1.38	12	113.3
September ...	30.04	56.0	64.0	44.6	73	„ 13th	35	„ 20th				61.0	...	58.8	S.W.	2.54	15	92.7
October ...	30.00	50.9	59.9	42.7	72	„ 7th	32	„ 28th				54.4	...	57.1	N.E.	2.23	10	88.9
November ...	30.06	41.5	49.9	35.0	58	„ 14th	24	„ 22nd				44.8	...	54.7	S.W.	0.69	9	47.1
December ...	29.73	39.3	43.1	34.8	55	„ 24th, 26th & 31st	11	„ 13th				40.5	...	48.5	S.W.	1.97	18	32.0
Totals ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26.71	194	1099.4
Means ...	29.96	49.9	56.8	41.7	...	...	...	...	...	...	...	53.8	...	52.9	S.W.	...	...	...



